Answer on Question #74147 – Math – Analytic Geometry

Question

Angle between the lines $x + 3 = 0$ and $y + 7 = 0$

Solution

The angle θ between the lines having slope m_1 and m_2 is given by

$$\tan\theta = \pm\frac{m_2 - m_1}{1 + m_1 m_2}$$

In our problem we have

$x + 3 = 0 => x = -3,$ Vertical line

$y + 7 = 0 => y = -t,$ Horizontal line

Then lines are perpendicular.

Therefore, the angle between the lines $x + 3 = 0$ and $y + 7 = 0$ is $90°$.